Remarks/Arguments:

Claims 1, 3-9, 10-20, and 22-36 are pending in this application, claims 22-36 being added by this amendment. In the outstanding Office Action, the Examiner has repeated an objection to the drawings made in a previous Office Action and annotated on a PTO-948 accompanying that previous Office Action. In response, Applicant herein submits thirteen pages of formal drawings to replace all drawings currently of record in this application.

The Examiner has further advanced a non-statutory double patenting rejection in light of pending U.S. Patent Application No. 09/654,202. This double-patenting rejection is provisional as the cited co-pending application has not yet issued or been allowed. M.P.E.P. § 804, Part I-B, provides that this rejection may ultimately be withdrawn (as to the first application to issue), made non-provisional (as to the second application to issue), or rendered moot (as when less than both applications issue). Applicant understands that a response to this particular provisional rejection may be delayed until such time that the rejection is made non-provisional. An attached Information Disclosure Statement and PTO-1449 includes a reference cited in that co-pending application that is not yet of record in this application.

The Examiner has also rejected all pending claims under 35 U.S.C. § 103(a) as being obvious over various combinations of prior art. Specifically, the Examiner has rejected claims 1, 2, 4-7, 9-12, 14-17, and 19-20 as being obvious over U.S. Patent No. 6,286,030B1 to Wenig et al (hereinafter, Wenig) in view of U.S. Patent No. 6,477,538B2 to Yaginuma et al (hereinafter, Yaginuma), and claims 3, 8, 13 and 18 as obvious over the combination of Wenig and Yaginuma further in view of U.S. Patent No. 6,223,215B1 to Hunt et al (hereinafter, Hunt).

Applicant has amended certain of the claims, summarized as follows. Claim 1 is amended to incorporate the substance of claim 2, to clarify (similar to the clarity of now

cancelled claim 10) that at least one line intersects less than all of the axes representing shopping steps (hereinafter, a dropout), and to delete certain limitations. Claim 1 does not require the line be a polygonal line as in former claim 2. Claims 2 and 10 are cancelled. The limitations deleted from claim 1 are re-presented in new claim 22. Claims 3, 16-17 and 19-20 are amended to change their dependency in light of the changes to claim 1. Claims 14-15 are amended to delete the restriction that the line representing a session is a polygonal line.

Support for the network aspect of newly added claims 23, 29, 30 and 36 may be found at least at page 11, lines 19-21. Support for the business transaction aspect of claim 23 may be found at least at page 12, lines 4-12 (business analyst). Support for claims 28 and 35 may be found at page 12, lines 11-12. Other new claims find support in the previously existing claims.

Claim 1 recites that a line corresponding to a shopping session intersects less than all of the axes representing shopping steps. This non-intersection with an axis is termed herein for brevity as a "dropout", and by way of example, is depicted in Fig. 8 as the termination of line 810 at the "clickthroughs" axis, and of lines 812 and 813 at the "basket placement" axis. The independent claims added herein each recite that a line representing the virtual path or clickstream data exhibit such a dropout. Inherent in a dropout is that the line must intersect at least one axis, else the line would not be graphically represented.

The Examiner's stated rejection to former claims 2 and 10 relate to the dropout aspect of claim 1 as amended herein, and relate only to Yaginuma. The discussion below of dropouts applies to each of claims 1, 23 and 30. Yaginuma teaches displaying, such as with a parallel axis coordinate system, the reuslts of a data mining process. The Examiner states at page 6 that Yaginuma teaches that when a field is not detected, then a connecting data point cannot be assigned and it is implicit that the line would drop out at that point. Applicant reads Yaginuma as teaching that the only polygonal lines displayed

are those for which the underlying product (or category searched) satisfy each and every value parameter selected by a user for the parallel axes. Specifically, Yaginuma teaches displaying the *same* number of coordinate axes as fields *detected* (col. 6, lines 43-45) (emphasis added); searching the entire record and obtaining values for *each* field (col. 6, lines 49-50) (emphasis added); and connecting the data points with a line (col. 7, lines 1-2). There appears no option in Yaginuma for a polygonal line that does not pass through each and every parallel axis.

Yaginuma's example for displaying a search for automobiles is illustrative. In accordance with col. 4, lines 65 of Yaginuma, a user selects parameters for each coordinate axis. Figs. 5-6 give exemplary criteria including fuel consumption, number of cylinders, weight, year, etc. Assuming a user selects only automobile model years 1999 and later (among other search criteria), the resulting display would include only automobiles meeting each and every one of the selected search criterion. Those automobiles that meet all other parameters stipulated by the user, but that are 1998 or older model years, are never displayed because those automobiles are never returned by the Yaginuma data mining process. This is consistent with the premise of Yaginuma's data mining, that only the data satisfying each of the user's search criteria is displayed. In generic terms, if the axes are A, B, C, and D, Yaginuma teaches mining the database and returning/displaying only those items that satisfy the values selected for each of A, B, C, and D. Those that satisfy only A, B, and D are not displayed, as they fail to satisfy every search criteria and are not selected from the database for display.

Conversely, assume the axes A, B, C and D are shopping steps. Claim 1 recites that at least one polygonal line is displayed that does not intersect all of the axes. A shopping session satisfying only A, B and C but not D would be selected, and it would be displayed as a polygonal line dropping out after the C axis. Yaginuma teaches away from this in a fundamental way; the purpose of its data mining process. Where Yaginuma seeks to isolate data that satisfies the search criteria, the display of the present invention provides valuable information wherein the criteria are not satisfied in total, the dropouts.

The dropouts graphically show a website operator or designed where potential customers are lost, and therefore isolates where certain web-pages may be less user-friendly than others.

The Examiner's citations to Yaginuma (col. 7. lines 1-7, col. 12, lines 20-30, and Fig. 33) at pages 11 and 13 of the Office Action describe a parallel coordinate axis system with polygonal lines, but no reference is seen as relating to dropouts. Applicant finds no teaching or suggestion within Yaginuma that teaches dropouts, but rather a consistent teaching away from displaying data that would exhibit a dropout.

While Wenig does include teachings respecting storing requests and responses between a client and a server (col. 1, lines 44-48), the Examiner concedes that Wenig does not specifically disclose graphically representing clickstream data. Wenig teaches reproducing for an auditor the specific web pages visited by a user, as described at col. 1, lines 51-55, col. 5, lines 25-30, and Figs. 4-6). Merely replacing the database of Yaginuma with the web pages stored by Wenig does not teach or suggest to one of ordinary skill in the art that the resulting display would include dropouts.

First, Yaginuma teaches away from displaying dropouts, so dropouts cannot be implicit in the combination. The data selected by Yaginuma for display must satisfy each and every selection criteria, and therefore intersects each and every axis; data exhibiting dropouts are excluded from graphical display. Second, there is no teaching or suggestion in Wenig that an auditor would be interested in viewing web activity that was never realized by a client whose activity is being audited. Where a polygonal line drops out from a parallel coordinate system, those axes not intersected by the line represent activity never realized in the underlying shopping session. Wenig neither describes dropouts nor teaches or suggests them because Wenig is not seen to indicate that unrealized web activity may hold valuable information. His brief remarks that auditing can be used to improve websites (col. 2, lines 1-2) is superficial and does not allude to dropouts, missed opportunities, lost customers, or other indicative language. Applicant contends that

neither Wenig nor Yaginuma suggest that value can be gleaned from a discontinuity (a dropout) as compared to a preferred result (a purchase, as where a polygonal line crosses all axes). Thus, the combination of Wenig with Yaginuma fails to teach or suggest a dropout as it is recited in amended claim 1 and in new claims 23 and 30.

Claims 12-13 recite a categorizer is a parallel axis for categorizing polygonal lines in the system, and is illustrated at Figs. 8-9 as different referring website A (808, 906) and B (807, 907). Claim 12 depends from claim 1, which recites the graphical representation is clickstream data. Clickstream data is inherently sequential. That is, a data point denoting that a user visited a second web page (e.g., placing a product in a basket) necessarily depends on the user visiting a first web page (e.g., the product description) that links to the second. The data points of Yaginuma (e.g., number of cylinders, auto model year, etc.) are seen to be independent in each and every instance. The cited examples (Yaginuma Figs. 6 and 19) and additionally Fig. 27 and 33, therefore do not show a categorizer but rather any generic axis through which each and every polygonal line of Yaginuma must pass, as detailed above. The Examiner's asserted combination of Wenig with Yaginuma would result in a display in which each and every polygonal line passes through each and every axis. There is no teaching or suggestion in Yaginuma that interdependent data, or sequential data points, may be graphically categorized. Only by employing sequential data points (inherent in claim 1) does the categorizer axis of claim 12 differ from other axes of the display. Yaginuma is directed to graphically displaying the results of data mined from a database of independent points, and thus does not make obvious a display with a categorizer axis. Since every line of a Yaginuma display must intersect every axis, ascribing any of those non-differentiated axes as a categorizer axis reads the limitation out of claim 12.

Claim 12 is not directed to the resulting display in isolation, but to a method of achieving that display. That method includes graphing clickstream data. Yaginuma does not appear to make obvious the method of claim 12, even though the resulting display (as in Figs. 27 and 33) may be graphically similar to Figs. 8-9 of the pending application. The

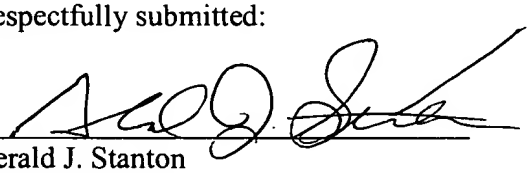
distinction is in the underlying data and what the parallel axes represent, and Yaginuma does not make obvious that underlying difference: the method of graphically representing clickstream data. This is true regardless of the teachings of Wenig or Hunt, for neither of those teach the graphical aspects of the claimed method.

Claims 14, 26 and 33 recite that a hyperlink associated with a line of the visual display links to a web page that provides additional information of the shopping session represented by the polygonal line. Applicant admits that hyperlinking is not novel. Col. 7, lines 25-28 of Yaginuma is seen to teach highlighting a data range to distinguish one polygonal line from others. The Examiner recites that claim 14 is obvious because clicking on a highlighted line is known in the art, Yaginuma highlights a line, and Wenig teaches clicking on a hyperlink to re-create a user session for further analysis.

Applicant contends that the Office action fails to set forth a prima facie case for obviousness as to claim 14. Assuming *arguendo* that clicking on a highlighted line is known in the art, no asserted combination of teachings makes obvious doing so to hyperlink to a web page that provides more information about the highlighted line or its underlying data. The 'further analysis' of Wenig is not analogous to additional information: further analysis may take place with no additional information, and additional information may be present without being analyzed. The asserted hyperlink teaching of Wenig re-creates the web pages that were previously viewed by a user, so that an auditor can re-create the user's web experience. There is no graphical data in Wenig from which the auditor hyperlinks, and there is no indication that hyperlinking leads to more detailed information. Claim 14 recites not only associating a hyperlink with a polygonal line, but that the hyperlink be to a web page that provides more information about what that line represents. Applicant contends that there is no teaching or suggestion of such a hyperlink in the combined references, and that the Office Action does not specify how the references teach such a feature or motivate one skilled in the art to include that feature.

Applicant submits that the above detailed arguments successfully traverse each and every outstanding rejection, save the provisional double-patenting rejection. The Applicant intends to respond to that rejection, if and when it becomes non-provisional, with a terminal disclaimer. Applicant respectfully requests that the Examiner withdraw all rejections and pass claims 1, 3-9, 10-20, and 22-36 to issuance without further delay.

Respectfully submitted:



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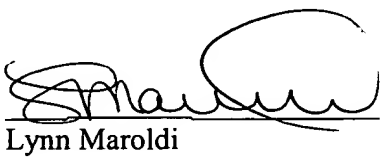

Lynn Maroldi